



## **Effect of Vocational and Technical Education on Employment and Economic Sustainability of College of Education Graduates in Oyo State**

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### **Abstract**

*The study examined the effect of Vocational and Technical Education on employability and economic sustainability of colleges of education graduates in Oyo state. Survey research design was adopted for the study. The population of the study consist 6,978 graduates for the past five years in public colleges of education in Oyo state. A sample size of one hundred and twenty (120) graduates was randomly selected for the study. The instrument tagged "Employment and self-Sustainability Assessment Scale (ESSAS) was used to collect the data. The instrument was validated by experts in the field of test and measurement and professionals in vocational and technical education and training. The data collected was using the mean and standard deviation statistics to answer research questions while the hypotheses were tested using the t-test and one-way analysis of variance. Findings revealed analysed that there were significant differences in the level of employability and the level of self-sustenance among colleges of educations graduates and that there was no significant differences in the status of employment and the course of study. It was recommended that the value of vocational and technical education should be emphasized in colleges of education and other tertiary institutions and disseminated in conferences, workshops and seminars.*

**Keywords:** Economics Development, Employability, Self-sustenance, Vocational and Technical Education

**JEL Classification:**

**Contribution to/Originality Knowledge:** The paper examines the effect of vocational and technical education on employment and economic sustainability of colleges of education graduates in Oyo State. It expatiates on the importance of vocational and technical education as a self-reliance course of study which provide job opportunities and also reduces unemployment among the populace at large.

### **1.0 Introduction**

Education is a critical factor for national and economic development. Any nation that wants to achieve national and economic development must invest heavily on human capital in education. Education deals with the total process of human learning by which knowledge is imparted, faculties are trained and different skills are developed. Education is also defined as the act or process of educating or applying discipline on the mind or a process of character training. (Oguntoye, 2019) It is a dynamic instrument of change. (Marshal, 2021) Education is expected to affect or condition the social behaviour of the person being educated also is a life-long



process which is always used to imply a positive state of mind. Adesemowo, & Sotonade, (2022).

According to Bamisaiye (2020), Education is a cumulative process of development of intellectual abilities, Skills and attitudes, all of which form our various outlooks and dispositions to action in life generally” education is the pristine essence of learning which makes us permanently able and disposed to benefit ourselves and other members of the society in the use we make of such learning. Marshal (2021) emphasizing the importance of education as a national economic investment pointed out clearly that the most valuable of all investment is that of human capital development in education. Human capital development of the economy and that there is a positive relationship between education and productivity and between productivity and earning.

Human capital is strategic to the development of any nation; this includes education, health, labour and employment. Human capital according to World Bank cited in Igun, (2021), is the total stock of knowledge, skills, competencies and innovative abilities possessed by the population. Among the most important changes that characterize the 21st century is the increasing importance of knowledge in economic growth and the advent of the world wide labour market and the global social and political transformation. Obisi and Anyim (2020) also noted that human capital development are talents, skills, competencies and other advantages which people possess, and can be put to better use to give organisation and nations more benefits. Nigerian Economic Summit Group (2020); Obisi (2021) further posited that human capital can be understood from the perspective of the masses that have acquired the relevant education and skills that can be put to positive use toward the development of the nation. Apparently, human capital represents the fundamental infrastructure from technological development and by extension economic development (Obisi, 2021).

However Makama and Pondi (2022) further explained that whatever direction we look at education, we find that education is a powerful means to social progress and stressed the fact that any one working with it (education) is working probably with the most powerful instrument. The case of education as an economic development agent rests on practical ground that people who were involved in skilled based economy activities generate increased wealth, hence an aspect of education that rest solely on practical activities is called vocational and technical education. Poverty is ravaging the economy at an alarming rate, an attempt to reduce the menace is at a very slow pace. The world bank (2020) defined poverty as a multi-dimensional phenomenon encompassing inability to satisfy basic needs, lack of education, vulnerability to shocks, violence and crime, lack of political freedom and voice. Although, poverty varies in its magnitude, the level of poverty in Nigeria is characterized by unemployment and shortage of food. Okunmadewa (2017) opined that poverty is a state in which people lack the purchasing power, insufficient access to social and economics services and limited opportunities for income generation. Generally, the large number of people in poverty implies an inefficient use of resources and increases the risks of social upheaval. Poor education and large illiterate population is a serious major contributing factor to poverty.

Vocational and Technical Education in Nigeria has now become so important that it is the fastest growing education market bring about the great and dynamic economic development in to the nation. Anyakoha (2022) pointed out that vocational and technical education involves in addition to general education the study of technologies and related sciences, as well as acquisition of practical skills and knowledge relating to occupations.

Vocational and Technical Education equip individuals with appropriate skills and competences to live and contribute meaningfully to the development of the society. It is a skill oriented field of study that possesses the capacity of equipping individuals with saleable and entrepreneurship skills. It is an occupational oriented skill that makes for self-employment as well as helping individuals to attain a useful and satisfying life. Nwabumwanne (2020) noted that skill training and development contributes largely to the development of survival competencies that can enable individual to face modern challenges. It has the responsibility of improving the life of individuals and families through job creation and self-reliance. Vocational and technical education not only helps in the preparation of skills and knowledgeable citizens, but also helps in developing national and economic status of a society in that when somebody acquires skills in any occupation, such person can establish his or her own business and even employ others thereby alleviating poverty and increase self-reliance.

Therefore the objective of this study is to examine the effect of vocational and technical education on employability and economic sustainability of colleges of education graduates in Oyo state while two research questions were raised and two hypothesis were tested at 0.05 alpha level of significance.

## **1.1 Significance of the Study**

It is expected that the findings of this research after being publish in reputable journals would be of tremendous importance to the government, ministry of education and its agencies, colleges of education students and graduates, vocational and technical education student in colleges of education and the public at large. It will enable the government to discern the areas to direct resources to boost economy and sustain colleges of education graduates. Findings will enable the ministry of education and its agent to discern which form of education to give a boost, fund and gives the right priority. The colleges of education students will be able to make informed choices of courses of study that will pay them better after graduation. It will enable vocational and technical education students to pay more than the usual attention to their course of study and have better strategies to establish a job or search for one even before graduation.

## **2.0 Literature Review**

### **2.1 Conceptual Issues**

Role of Vocational & Technical Education in Sustainable:

National Development Conceptual Nation building or development has to be sustainable in practical terms. This however, is dependent on available resources, beneficially as well as keeping the physical environment safe, healthy, stable and highly conducive. Sustainability,



according to the world commission on environment and development cited in Okafor, Onuka & Chikezie (2018) is the development that meets the needs of the present without compromising future generation opportunities to meet their own needs. Sustainability includes a just and peaceful society, gender equality and intergeneration equity. Technical and vocational education and training has been identified as a tool for sustainable and stable economy. In Nigeria, vocational and technical education and training was previously not seen as fundamental to national development or for the economic development, but for school dropouts and never do well individuals. Okafor Onuka & Chikezie (2018) asserts that no nation can move forward technologically, industrially and economically without developing a strong partner initiative in the creation of wealth, poverty reduction and employment generation through technical and vocational education and training

## **2.2 Theoretical Framework and Empirical Review**

The study hinged on Learning theory which based on the major three main learning theories were, behaviourism, cognitivism, and constructivism. These theories are discussed in relation to how they can be applied to vocational and technical education curriculum to allow students to understand learning objectives that can be useful for employability and economic sustainability of colleges of education and other tertiary institution graduates.

### **2.2.1 Behaviourist Learning Theory**

Behaviourist learning theory emphasized the role of the environment in determining behaviour (Hassan, 2019), whereby, an event or activities in the environment will cause something to happen in the mind, which then causes some behaviour to occur ( Flanagan, 2019). Hence, the instructional designer will use this theory by paying attention to the setting of the environment where events or activities take place, and possible to manipulate the consequences of different behavioural responses (Sink, 2020) or teachers would present lesson objectives with some hints or cues in a linear fashion to lead students to a specific behaviour, and use effect to reinforce the specific behaviour. In addition, behaviourism provides some concepts or assumptions for assessment purpose. For example, the engineering syllabuses normally integrate theories with other useful applications, such as, behaviour shaping and behaviour modification and task analysis likewise vocational and technical education (Hassan, 2019; Juhmani, 2020).

### **2.2.2 Cognitive Learning Theory:**

Cognitive theory will assist learner to obtain the thinking techniques in order to improve performance in job (Sink, 2020), because the learning occurs was based on how information is encoding, storage, and retrieval in the human memory (Foshay, Silber, & Stelnicki, 2021) and frequently follow Gagné's nine events of instruction. For example, findings from (Hua's 2020) study reported a good level of program quality and achieved good performance on instruction, interactivity, and technique aspects that allow share approach to integrate information literacy within academic programmes, results in, a more effective techniques to curriculum design based on the ADDIE model. However, this study was lack of cognitive load measurement techniques if it is to continue to use as a framework for instructional design. In addition, the

study also lack explanation about the constructs itself, results in problems with validity and reliability issue, hence, it may not useful when tested in classrooms or real-world scenarios.

### **2.2.3 Constructivist Learning Theory:**

Constructivism is a learning theory that concerned with the experiences and contexts that make the learners willing and enable to learn. Constructivist learning design focuses on activity that allow create and recreate past experience of students and the modification to new learning. Students are core matter while teachers just act as facilitators (Botto, Schorr, & Lema 2019).

A study by Sink, (2020). investigated the validity of constructivism, second language acquisition and multimedia learning theories and design principles (modified ADDIE model of instructional design) for design and development of multimedia software in teaching and learning Arabic vocabulary for non- Finding native Arab students at International Islamic University Malaysia (IIUM), Malaysia. of the study showed that the production and development of an Arabic vocabulary multimedia courseware based on theories, design and development methods as discussed earlier had a valid impact on the learning and meet the contextual analysis of learners needs. However, no explanation on instructional design theories used to create the courseware were provided. In addition, the study also did not report the procedures involved in validating the results generated by the study. (Hau's, 2020).

The framework for strategic sustainable development is a tool that is designed to provide the principles which are used to back-cast from a vision of a sustainability future. Education for sustainability aims at helping people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decision. Education for sustainable development covers different areas from elementary to university education. One of these areas is Vocational and Technical Education Training which is the type of education that emphasizes on the acquisition and application of the skills, knowledge and attitudes required for employment in a particular occupation in any field of social and economic activity (Okafor, Onukes and Chikezie, 2020).

Concepts of Vocational education is any form of education that has its primary purpose as to prepare persons for employment in recognized occupations. It provides the skills, knowledge and attitudes necessary for effective employment in specific occupation. Okoro (2019) defines vocational education as education that provides a special programme offered at secondary and post-secondary levels. Vocational education is education for occupational preparation. It is also regarded as that aspect of the total education process that focuses on individual occupation. In their view, Eneyoh, Okon & Okeng (2021) stated that vocation education has six major areas; these includes: - industrial technical education, agricultural education, business education, home economic education, distributive education and health occupation education. Nevertheless, the list may include fine and applied arts education and even computer education. Oguntoye (2019), Oghene (2019), and Olaitan(2020) opined that graduates in school of vocational and technical education, in colleges of education do jobs that relates to their course of study after school. Oguntoye (2019) was specific in mentioning home economics education, agricultural education and fine and applied arts. Oghene (2019) was also specific in mentioning



about business education programmes that those who graduate from business education department do get jobs that relates to their field of study.

**Technical Education:** this is a post-secondary vocational training programme whose major purpose is the production of technicians. Technical education is a special grade of vocational education which can be distinguished from other vocational education programmes because more mathematics and science are required in the training programme. The graduates of this programme are called craftsmen. It is more often found in trade and industrial education. Vocational technical education is a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life, Baba, (2020) submitted that vocational preparation must always be viewed against the backdrop of the needs of the society and of the individual. While meeting the demands of the economy, the abilities of the individuals must be utilized to the fullest meeting the job needs of individuals is a crucial objective of vocational and technical education for sustainable national development. Baba (2020) Basset (2021) and Igweh (2021) that most people who claim to be working in Nigeria were just working only on hand to mouth existence. Jobs most people do cannot sustain them.

Sustainable national development refers to the ability to harness all available resources, human, material or economic to bring out the potentials of a nation. In view, Dzungwe (2020) affirmed that National development is the ability to flow along with other nations in terms of effective management and utilization of current development in science and technology. According to Aguele & Uhuamuavbi (2019) development means “bringing a nation to an advanced or a highly organized state, that is utilizing all the human and material potentials of a nation to bring about growth and development”. Development has to do with employment for all the citizens of a nation. Ehwarieme, Ahmiegheme and Enosekhatob (2019) also added that the most important thing is not the job in itself but the sustainability, that employment without sustainability is work in futility. For the economy of the nation to develop, employment should be sustainable. However, sustainable development is attaining and maintaining the height of standard in the developmental agenda of the nation. This include; education, health services, economic, transportation, good road networks, justice and equity, food security and all the social amenities needed for safe and healthy living of citizens in a country.

### **3.0 Methodology**

#### **3.1 Research Design**

The research design for the study is descriptive survey.

##### **3.1.1 Data and Sources**

The population of the study constituted all public colleges of education graduated in Oyo state for the five years totalling 6,789 gathered from four public colleges of education in Oyo state.

### **3.1.2 Sampling Technique**

Two public colleges of education were however sampled using simple random sampling techniques. A total of hundred and twenty students, sixty students from each institution were sampled for the study.

## **3.2 Method of Data Collection**

The instrument was administered by the researchers with the help of four other research assistants. Out of the one hundred instruments administered, the researchers were able to return with 96.

### **3.2.1 Variables and their Measurement**

The instrument tagged “employment and self-sustainability assessment scale’ (ESSAS) was used to gather data for the research. The instrument has twenty-five items of five rating scales of Likert type. The instrument was validated for the study by experts and professionals in the school of vocational and technical education and as well as the department of test and measurement of the colleges of education used for the study. Reliability level of the of the research instrument was tested using Kuder Richardson (KR-20) which yielded a coefficient of 0.78 showing that the instrument was reliable.

## **3.3 Method of Data Analysis**

Data gathered were analysed using mean and standard deviation to answer the research questions while t-test and one-way analysis of variance were used to test the hypotheses at an alpha level of 0.05 level of significance in such a way that an alpha level above 0.05 is taken as accepted while an alpha level below 0.05 is taken as rejected.

## **4.0 Data Analysis**

### **4.0.1 Research Question 1.**

What is the mean rating of the employment status and the course of study of the colleges of educations graduates in Oyo state?

Table One: Mean ratings of the employment status and the course of study

One-sample statistics

	N	Mean	Std. Deviation	Std. Error Mean
Employment status	96	40.33	10.761	1.098
Course of study	96	40.17	13.227	1.350



Table one shows the mean rating of employment status to be 40.33 and the standard deviation to be 10.76 and the mean rating of the course of study status to be 40.17 while the standard deviation to be 13.22.

### Hypothesis 1:

There is no significant difference in the employment status and the course of study of the colleges of education graduates in Oyo state.

Table Two: Analysis of variance of employment status and course of study.

#### ANOVA

##### Employment status

	Sum of squares	Df	Means square	F	Sig.
Between Groups	1261.855	17	74.227	.594	.886
Within groups	9739.478	78	124.865		
Total	11001.333	95			

Table Two shows the sig. value between employment status and the course of study to be .886 with the degree of freedom to be 95. Since the sig. value is higher than the alpha level of 0.05 the null hypothesis is thereby accepted that there is no significant differences in the employability status and the course of study of graduates in vocational and technical education in colleges of education in Oyo state.

### 4.0.2 Research Question 2.

What is the differences in the employability rate and self-sustenance of those who studied vocational and technical education and other courses in colleges of education in Oyo state?

Table: Three Means Difference between Employability Rate and Self-Sustenance

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Employability rate	96	4	66	39.76	11.380
Self-sustainability	96	14	65	39.88	10.906
Valid N(list wise)	96				



Table Three shows the mean ratings of the rate of employability to be 39.76 and the rate of self-sustenance to be 39.88 with the standard deviation to be 11.38 and the level of self-sustainability to be 10.91.

## Hypothesis 2

There is no significant difference in the employability rate and self-sustenance of those who studies vocational and technical education in colleges of education in Oyo state.

Table Four: level of employability and self-sustainability in colleges of education in oyo sate.

### One-Sample Test

	Test Value = 0					
	T	Df	Sig.(2-tailed)	Mean Difference	95% Confidence interval of the Difference	
					Lower	Upper
Employability rate	34.232	95	.000	39.760	37.45	42.07
Self-sustainability	35.825	95	.000	39.875	37.67	42.08

The table above shows the sig. value to be .000, since the sig. value is lesser the alpha level of 0.05 at the degree of freedom of 95, there is significant difference in the employability rate and self-sustainability rate of vocational and technical education students in colleges of education in Oyo state.

## 4.1 Result and Discussion

The result of the findings revealed that there is significant difference in the employability rate and self-sustainability rate of vocational and technical education students in colleges of education in Oyo state. This shows that people were employed after graduation, but the self – sustenance level was low. This may mean that the employment most people had afforded them only to live on hand to mouth existence. This findings was in agreement with the findings in Baba (2020) Basses (2021) and Igweh (2021) that most people who claim to be working in Nigeria were just working only on hand to mouth existence. Jobs most people do cannot sustain them. The researchers added that most add menial jobs to the main job that they were holding still most workers were not able to meet up with their family obligations. Ehwarieme, Ahmiegheme and Enosekhatob (2019) also added that the most important thing is not the job in itself but the sustainability, that employment without sustainability is work in futility. For the economy of the nation to develop, employment should be sustainable. This researchers



encouraged individuals creating job by themselves so that they can grow with the job and add sustainability with it as time progresses.

Findings also revealed that there is no significant difference in the employability status and the course of study of graduates in vocational and technical education in colleges of education in Oyo state. This means that most graduates in vocational and technical education do jobs that relates to their course of study either in form of paid employment or starting it as an entrepreneurial outfit. This findings was in agreement with the findings in the research findings in Oguntoye (2019), Oghene (2019), and Olaitan(2020) that graduates in school of vocational and technical education, in colleges of education do jobs that relates to their course of study after school. Oguntoye (2019) was specific in mentioning home economics education, agricultural education and fine and applied arts. Oghene (2019) was also specific in mentioning about business education programmes that those who graduate from business education department do get jobs that relates to their field of study.

## **5.0 Conclusion**

This research concluded that there is significant difference in the employability rate and self-sustainability rate of vocational and technical education students in colleges of education in Oyo State and that there is no significant difference in the employability status and the course of study of graduates in vocational and technical education in colleges of education in Oyo State.

## **5.1 Recommendations**

Based on the conclusion of this research, it is thereby recommended as follows:

1. Government should Endeavour to assist the graduates of vocational and technical education in the area of funding so that they can be able to set them up to the business they set up by themselves can sustain them.
2. Since the course of study of graduates of vocational and technical education relates to their course of study, the value of vocational and technical education should be disseminated in conferences, seminars and workshops so that more students can put in for the course to put employment prospect in the society.
3. Government should adequately fund vocational and technical education programmes so that needed infrastructure and facilities for training can be provided for the school during the training.
4. Philanthropist should also assist in setting graduates up by giving them the necessary incentives that can increase sustainability in their employment status.

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